

Claims

1. A receiver for an optics telecommunication system, the receiver comprising a first receiving device and means for focusing a received light beam carrying a signal towards the first receiving device, characterized in that it further comprises at least a second receiving device and a beam splitter for splitting the focused light beam partially towards the first receiving device and partially towards the at least second receiving device.
2. The receiver according to claim 1, characterized in that the beam splitter provides an asymmetric ratio in order to send different portions of the received signal power to the first and to the at least second receiving device.
3. The receiver according to any one of claims 1 or 2, characterized in that the first receiver device comprises an APD diode.
4. The receiver according to claim 1 or 2, characterized in that the at least second receiver device comprises a PIN diode.
5. The receiver according to claim 2, characterized in that the largest portion of the received signal is provided to the first receiving device.
6. The receiver according to claim 5, characterized in that the portion of the received signal which is provided to the first receiving device is between 85-98 %, preferably around 90%, of the whole received power.
7. The receiver according to claim 1, characterized in that it further comprises a hitless switch block in turn comprising a switch logic block respondent to input power information from the first and the at least second receiving devices and to phase information from a phase comparator, the switch logic block driving a switch selecting a signal between the signal from the first receiving device and the signal from the at least second receiving device.
8. The receiver according to claim 1, characterized in that the optics telecommunication system is a Free Space Optics telecommunication system.

HIGH DYNAMIC RECEIVER FOR FREE SPACE OPTICS APPLICATION
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9. Method for providing high dynamic features in an Optics receiver, the receiver comprising a first receiving device and means for focusing a received light beam carrying a signal towards the first receiving device, characterized by the steps of providing at least a second receiving device and
5 splitting the focused light beam partially towards the first receiving device and partially towards the at least second receiving device.

10. The method according to claim 9, characterized in that the step of beam splitting comprises the step of beam splitting according to an asymmetric ratio in order to send different portions of the received signal power to the first
10 and to the at least second receiving device.

11. The method according to any one of claims 9 or 10, characterized in that the first receiver device comprises an APD diode and at least one second receiver device comprises a PIN diode.

12. The method according to any one of claims 9 or 10, characterized
15 in that the step of beam splitting comprises providing the largest portion of the received signal to the first receiving device.

13. The method according to claim 12, characterized in that the portion of the received signal which is provided to the first receiving device is between 85-98 %, preferably around 90%, of the whole received power.

20 14. The method according to claim 9, characterized by selecting a signal between the signal from the first receiving device and the signal from the at least one second receiving device according to phase information from a phase comparator and according to signal received power information.

25 15 The method according to claim 9, characterized in that the optics telecommunication system is a Free Space Optics telecommunication system.